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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,542	04/16/2004	Donald Paul Archiabile	27823-10	2165

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EXAMINER
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TRINH, TAN H

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/826,542

Applicant(s)

ARCHIABLE, DONALD PAUL

Examiner

TAN TRINH

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 is/are allowed.
- 6) ☒ Claim(s) 1-17, 19 and 21-26 is/are rejected.
- 7) ☒ Claim(s) 18 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on 04-16-2004, the information disclosure statement is being considered by the examiner.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-8, 13-15, 17, 19, 21, 23 and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Beamish (U.S. Patent No. 6,445,732).

Regarding claim 1, Beamish teaches a system for dynamically reconfiguring a wireless communication device (102) by processing a signal provided by the wireless communication device (100) (see fig. 1A-B, col. 2, lines 10-30), comprising: an attenuation level logic (232) operably connectable to the wireless communication device (see fig. 2, col. 5, lines 41-49), the attenuation level logic (232) being configured to determine a desired attenuation level (290) for a second wireless (102) communication signal derived from a first wireless (100) communication signal provided by the wireless communication device (100) (see fig. 1 and 2, col. 5, lines 49-55); and an attenuation circuit (290) operably connected to the attenuation level logic (232) (see fig. 2, col. 5, lines 50-53), the attenuation circuit (290) being configured to produce the second wireless (102) communication signal by attenuating the first wireless (100) communication

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signal to the desired attenuation level (see fig. 1A-B and fig. 2, col. 5, lines 41-63). Since the Beamish teaches the wireless device with attenuation level logic for control attenuation signal, including but not limited to coreless phone, cell phone, personal communication device and other wireless communication device, like wireless computer and wireless router.

Regarding claim 2, Beamish teaches the attenuation level logic (232) determines the desired attenuation level (290) based, at least in part, on a distance between the wireless communication device and a receiver of the second wireless computer communication signal (see fig. 1A-B, col. 7, lines 15-31).

Regarding claim 4, Beamish teaches the attenuation circuit being programmatically controllable by the attenuation level logic (232) (see fig. 2, col. 4, lines 59-col. 5, lines 4).

Regarding claim 5, Beamish teaches the attenuation circuit (290) comprising an attenuator (290) (see fig. 2, col. 5, lines 50-55).

Regarding claim 6, Beamish teaches the attenuation circuit (214) comprising a reduction bridge circuit (220) (fig. 7, col. 4, lines 62-col. 5, lines 9 and col. 6, lines 34-42).

Regarding claim 7, Beamish teaches the attenuation circuit includes one or more transmission media having different selectable line loss characteristics (see col. 5, lines 50-60 and col. 6, lines 34-57, col. 7, lines 66-col. 8, lines 6).

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Regarding claim 8, Beamish teaches a line loss characteristic is related to the length of a transmission medium (see col. 7, lines 66-col. 8, lines 6).

Regarding claim 13, Beamish teaches the attenuation level logic determines the desired attenuation level by evaluating a response to a set of negotiation messages transmitted with different attenuation levels determined by the attenuation level logic (see fig. 6, step 620, col. 9, lines 9-38).

Regarding claim 14, Beamish teaches the attenuation level logic periodically re-determines the desired attenuation level (see col. 9, lines 32-54).

Regarding claim 15, Beamish teaches a method, comprising: associating an attenuation circuit (290) with a wireless communication device (102) (see fig. 1A-B and 2, col. 5, lines 41-49); determining a desired attenuation level (290) for a wireless device (102) communication signal produced by the wireless communication device (100) (see fig. 1A-B and 2, col. 5, lines 49-55); and configuring the attenuation circuit (290) to attenuate the wireless device communication signal to the desired attenuation level (see fig. 1A-B and fig. 2, col. 5, lines 41-63).

Regarding claim 17, Beamish teaches determining the desired attenuation level includes: calculating a distance between the wireless communication device and a receiver of the wireless

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device communication signal; and determining the desired attenuation level (290) based, at least in part, on the distance (see fig. 1A-B, col. 7, lines 15-31).

Regarding claim 19, Beamish teaches determining the desired attenuation level includes: calculating a signal strength for a wireless signal received from a wireless device; and determining the desired attenuation level based, at least in part, on the signal strength (see col. 7, lines 16-41).

Regarding claim 21, Beamish teaches determining the desired attenuation level (290) includes: transmitting a set of wireless terminal communications to a wireless device with which the wireless terminal communication device is communicating (see fig. 1A-B, col. 4, lines 40-col. 5, lines 16), where the set of wireless computer communications are attenuated at different levels; and determining the desired attenuation level based, at least in part, on a response to transmitting the set of wireless terminal communications (see col. 7, lines 66-col. 8, lines 48):

Regarding claim 23, Beamish teaches configuring the attenuation circuit includes: programmatically changing a resistance in a reduction bridge (220) associated with the attenuation circuit (214) (fig. 7, col. 4, lines 62-col. 5, lines 9 and col. 6, lines 34-42).

Regarding claim 25, Beamish teaches configuring a wireless communication device includes: selecting an attenuator through which the wireless communication signal passes before being transmitted (col. 8, lines 49-col. 9, lines 38).

Regarding claim 26, Beamish teaches a system for reconfiguring a wireless communication device to transmit at a dynamically selectable attenuation level (see fig. 1A-B, col. 2, lines 10-30), comprising: means for determining a desired attenuation amount by which a wireless device communication signal is to be attenuated (see fig. 1A-B and fig. 2, col. 5, lines 41-63); and means for attenuating the wireless device communication signal by the desired attenuation amount (see fig. 2, col. 5, lines 41-63 and col. 7, lines 66-col. 8, lines 40).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beamish (U.S. Patent No. 6,445,732) in view of Heuer (U.S. Patent No. 5,663,968).

Regarding claims 3 and 16, Beamish teaches the attenuation circuit (290). But Beamish does not mention the attenuator is being manually controllable by a user.

However, Heuer teaches the attenuator is being manually controllable by a user (see fig. 2, adjustable attenuators 24 and 26, col. 5, lines 19-30 and lines 54-61).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify above teaching of Beamish with Heuer, in order to provide user

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with the flexible for adjusting the attenuator with the manually control or automatically control (see suggested by Heuer on col. 5, lines 19-23).

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beamish (U.S. Patent No. 6,445,732) in view of Matsumoto (U.S. Pub. No. 2003/0217349).

Regarding claim 9, Beamish teaches an attenuator on the wireless communication device (see fig. 1A-B). But Beamish does not mention a line loss characteristic is determined by a transmission medium dielectric material.

However, Matsumoto teaches a line loss characteristic is determined by a transmission medium dielectric material (see figs. 6-7, page 2, section [0022] and page 4, sections [0069-0070]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify above teaching of Beamish with Matsumoto, in order to provide the design target value of the transmission delay time that occur on a transmission line concerned base on the device information (see suggested by Matsumoto on page 2, section [0031]).

7. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beamish (U.S. Patent No. 6,445,732) in view of Sheth (U.S. Pub. No. 2005/0010755).

Regarding claim 10, Beamish teaches a wireless communication device (see fig. 1A-B col. 2, lines 10-30). But Beamish does not mention the wireless communication device is a router.



However, Sheth the wireless communication device is a router (see fig. 1, page 3, sections [0029]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify above teaching of Beamish with Sheth, in order to routes the data to and from the terminal and base station.

Regarding claims 11-12, Beamish teaches a wireless communication device (see fig. 1A-B col. 2, lines 10-30). But Beamish does not mention the second wireless communication device communication signal conforms to an IEEE 802.11 protocol and IEEE 802.15 protocol.

However, Sheth teaches the second wireless communication device communication signal conforms to an IEEE 802.11 protocol and IEEE 802.15 protocol (see fig. 1, pages 3-4, sections [0034 and 0037]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time invention was made to modify above teaching of Beamish with Sheth, in order to configured power level that is related to the distance between the wireless communication device with WLAN and Bluetooth communication system.

8. Claims 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beamish (U.S. Patent No. 6,445,732).

Regarding claim 22, Beamish teaches retransmitting the set of wireless device communications; and re-determining the desired attenuation level (see fig. 1A-B and fig.5, step 520 with evaluate signal power level than set attenuation level, col. 8, lines 28-48). Since the evaluation signal power level than set attenuation level and responding the received power, that

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obvious to re-determining retransmitting for wireless device communications signal. Therefore, Beamish teaches the limitation of the claim invention.

Regarding claim 24, Beamish teaches configuring the attenuation circuit (290) includes: selecting a desired line loss associated with a transmission medium through which the wireless device communication signal passes before being transmitted (see fig. 1A-B. col. 4, lines 59-col. 5, lines 16). Since the signal that is used to select a signal level adjustment on the attenuation circuit and then pass the signal to other device that is obvious to selecting a desired line loss passes before transmitted. Therefore, Beamish teaches the limitation of the claim invention.

#### ***Allowable Subject Matter***

9. Claims 18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 18 and 20, Beamish teaches attenuation level is selected base on the distance of the category (see col. 7, lines 36-65). However: Beamish and prior art fail to disclose; the re-calculating the distance between the wireless computer communication device and the receiver of the wireless computer communication signal; and re-determining the desired attenuation level based, at least in part, on the re-calculated distance, recalculating a signal strength for a wireless signal; and re-determining the desired attenuation level based, at least in part, on the recalculated signal strength, as specified in claims 18 and 20.

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10. Claim 27 is allowed.

***Reasons for allowance***

11. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 27, Beamish teaches attenuation level is selected base on the distance of the category (see col. 7, lines 36-65). However: Beamish and prior art fail to disclose; a data packet for transmitting attenuation data associated with reconfiguring a wireless computer communication device by attenuating a wireless computer communication signal produced by the wireless computer communication device to a dynamically selectable attenuation level, comprising: a first field that stores an attenuation level data; and a second field that stores a quality of service data, where the quality of service data is related to receiving a wireless computer communication signal attenuated to a level described by the attenuation level data, as specified in claim 27.

***Conclusion***

12. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(571) 273-8300, (for Technology Center 2600 only)**

*Hand-delivered responses should be brought to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314).*

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan Trinh whose telephone number is (571) 272-7888. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Anderson, Matthew D., can be reached at (571) 272-4177.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is (703) 306-0377.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tan H. Trinh  
Division 2618  
Feb. 16, 2007

**PATENT EXAMINER**  
**TRINH, TAN**

